



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,626	02/23/2004	Jeffrey G. Cherny	00AB070A / ALBRP175USA	8398
7590 06/16/2006			EXAMINER	
Susan M. Donahue Rockwell Automation 704-P, IP Department 1201 South 2nd Street Milwaukee, WI 53204			MCCARTHY, CHRISTOPHER S	
			ART UNIT	PAPER NUMBER
			2113	
DATE MAILED: 06/16/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/784,626	Applicant(s) CHERNY ET AL.	
	Examiner Christopher S. McCarthy	Art Unit 2113	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-13 and 15-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,2 and 4-9 is/are allowed.
- 6) ☒ Claim(s) 10-13,15-17 and 19-21 is/are rejected.
- 7) ☒ Claim(s) 18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 10, 15-17, 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parker et al. U.S. Patent 6,112,312 in view of Graef et al. U.S. Patent 6,083,269.

As per claim 10, Parker teaches a method for testing industrial control modules, comprising: developing at least one test template file with a plurality of test level type functions (column 4, lines 47-51); compiling and linking the at least one test template file to at least one instrument component (column 4, lines 56-66); and executing the at least one test template file in simulation mode to determine if the at least one test template file operates properly (column 10, line 66 – column 11, line 11) and executing the at least one test template file in normal mode to test the industrial control module (column 3, lines 30-33). Parker does not explicitly teach wherein the steps of executing the template in simulation mode and in normal mode to be subsequent from the prior to the former. Graef does teach the verification of the template file in the simulation mode to be subsequently prior to the execution in the normal mode (column 5, line 39 – column 6, line 14). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the verification process of Graef in the testing process of

Art Unit: 2113

Parker. One of ordinary skill in the art would have been motivated to use the verification process of Graef in the testing process of Parker because Graef teaches the benefits of improving in the design verification so as to reduce time and cost and, therefore, increase efficiency of the design cycle (column 1, lines 6-9); and explicit desire of Parker (column 3, lines 7-10).

As per claim 15, Parker teaches the method of claim 10, at least one of the at least one test template file and the instrument component is a dynamically linked library (column 7, lines 48-52; column 4, lines 63-66).

As per claim 16, Parker teaches the method of claim 15, further comprising decomposing the instrument component into at least one basic functional module associated with a particular type of at least one instrument that is to be tested (column 3, lines 14-19).

As per claim 17, Parker teaches the method of claim 16, the at least one basic functional module is at least one of a reset, self-test, setup, and read module (column 3, lines 14-21; column 7, lines 46-47).

As per claim 19, Parker teaches the method of claim 10, further comprising developing the at least one test template file at a remote location (column 4, lines 54-62; column 6, lines 58-64).

As per claim 20, Parker teaches a system that facilitates test development for testing of industrial control modules, comprising: means for developing at least one test template file (column 4, lines 47-51); means for verifying of the at least one test template file operates properly (column 10, line 66 – column 11, line 11); and means testing the industrial control module (column 3, lines 30-33). Parker does not explicitly teach wherein the testing of module is to be accomplished using the verified test template file. Graef does teach using the verified

Art Unit: 2113

test template file to test the module (column 5, line 39 – column 6, line 14). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the verification process of Graef in the testing process of Parker. One of ordinary skill in the art would have been motivated to use the verification process of Graef in the testing process of Parker because Graef teaches the benefits of improving in the design verification so as to reduce time and cost and, therefore, increase efficiency of the design cycle (column 1, lines 6-9); and explicit desire of Parker (column 3, lines 7-10).

As per claim 21, Parker teaches the system of claim 20, further comprising means for developing the at least one test template file at a remote location (column 4, lines 54-62; column 6, lines 58-64).

3. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parker in view of Graef in view of *Microsoft Computer Dictionary* (Microsoft).

As per claim 11, Parker in view of Graef teaches the method of claim 10, developing at least one test template file comprises providing a plurality of test level type functions, function calls, and standard instrument library calls (column 4, lines 54-67). Parker does not wherein these items are commented out; however, Parker does teach the modifying, adding and deleting of a template file as to perform a desired test (column 3, lines 38-41). Microsoft does teach the technique of commenting out code (page 97). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the commenting out technique of Microsoft in the code modification of Parker. One of ordinary skill in the art would have been

Art Unit: 2113

motivated to use the commenting out technique of Microsoft in the code modification of Parker because Microsoft teaches the commenting out of code as a means to temporarily change the code. This is an explicit desire of Parker in that the template file is not to be permanently changed, but only modified for a specific test (column 2, line 58 – column 3, line 2, 38-41).

As per claim 12, Parker in view of Graef teaches the method of claim 11, further comprising the test level type functions, function calls, and standard instrument library calls for a specific unit to be tested (column 4, lines 54-67). Parker does not teach the uncommenting of such code; however, however, Parker does teach the modifying, adding and deleting of a template file as to perform a desired test (column 3, lines 38-41). Microsoft does teach the technique of commenting out code (page 97, wherein uncommenting is implicitly taught as the opposite definition). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the uncommenting technique of Microsoft in the code modification of Parker. One of ordinary skill in the art would have been motivated to use the uncommenting technique of Microsoft in the code modification of Parker because Microsoft teaches the commenting/uncommenting of code as a means to temporarily change the code. This is an explicit desire of Parker in that the template file is not to be permanently changed, but only modified for a specific test (column 2, line 58 – column 3, line 2, 38-41).

As per claim 13, Parker teaches the method of claim 12, further comprising inserting code into the at least one of the test level type functions to provide functionality to the at least one of the test level type functions (column 4, lines 54-67).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claim 20 is rejected under 35 U.S.C. 102(e) as being anticipated by Graef et al. U.S. Patent 6,083,269.

As per claim 20, Graef teaches a system that facilitates test development for testing of industrial control modules, comprising: means for developing at least one test template file; means for verifying of the at least one test template file operates properly; and means testing the industrial control module with the verified test template file (column 5, line 39 – column 6, line 14).

Allowable Subject Matter

6. Claims 1-2, 4-9 are allowed.
7. Claim 18 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

8. Applicant's arguments with respect to claims 10-13, 15-17, 19-21 have been considered but are moot in view of the new ground(s) of rejection.


Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: See attached PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher S. McCarthy whose telephone number is (571)272-3651. The examiner can normally be reached on M-F, 9 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (571)272-3645. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Christopher S. McCarthy

Application/Control Number: 10/784,626
Art Unit: 2113

Page 8

Examiner
Art Unit 2113

csm
June 5, 2006